

Northwest Fisheries Science Center
Fish Ecology Division
2725 Montlake Boulevard East
Seattle, Washington 98112-2097

September 28, 2005

MEMORANDUM FOR: F/NWR3 - Leslie Schaeffer

FROM: F/NWC3 - John W Ferguson

SUBJECT: Request for modification of ESA Permit
#1410 To Integrate Coho Salmon Listing
Status Change

We request modification of ESA Section 10 Permit #1410 to incorporate coho salmon take as a result of recent changes to ESA listing status for this species in the Columbia River. The request affects Section A, Take Descriptions and/or Levels, of the Permit; all other sections of the application remain unchanged.

This work examines the relationship between the ecology of large marine fish predators and forage fishes off the Columbia River and salmonid ocean survival. The maximum number of coho salmon caught in the course of these pursuits has been 2,350 fish in 2001. The attached table shows the estimated listed proportion of coho salmon take by type and life history stage based on preliminary numbers for a revised estimation memorandum supplied by Doug Marsh (NMFS). We request that these numbers be added to the existing take table so that coho salmon take is covered under Permit #1410.

For this research, all adult coho salmon encountered are immediately returned to the sea after measuring, with no observed mortalities in past sampling. As with all juveniles encountered in this work, juvenile coho salmon are measured and then frozen for later laboratory analyses (genetics, lipids, disease, age and growth, and feeding). Appropriate take categories for each of these actions is included in the attached table.

If you have any questions concerning this request, please contact Robert Emmett at (541) 867-0109.

Attachment

cc: F/NWC3 - Casillas
F/NWC3 - Emmett
F/NWC3 - Frick
F/NWC3 - Gores

Table 1. Estimated annual take descriptions of recently ESU-listed coho salmon during the BPA Plume/Predator studies. All juveniles are sacrificed and taken to the laboratory for further analysis; adults are immediately returned to the system at the point of capture. N/A = not applicable.

ESU/Species	Origin	Life Stage	Take Activity	Number of Fish Authorized to Take	Requested Authorized Unintentional Mortality	Research Location	Research Period
Lower Columbia River (LCR) Coho salmon	Wild	Adult	Capture, handle, release	7	0	OR/WA Coastal Ocean	April - November
LCR Coho salmon	Wild	Juv.	Intentional mortality	61	N/A	OR/WA Coastal Ocean	April - November
LCR Coho salmon	Hatchery	Adult	Capture, handle, release	90	2	OR/WA Coastal Ocean	April - November
LCR Coho salmon	Hatchery	Juv.	Intentional mortality	815	N/A	OR/WA Coastal Ocean	April - November